

1. A method of automatically selecting screen characteristics values to be used for printing a color image, comprising the steps of:

forming a digital representation of said color image, said digital representation comprising a plurality of separations;

dividing at least one said plurality of separations into a plurality of regions; and

assigning at least one screen characteristic value to each said plurality of regions.
2. The method of claim 1, wherein said step of dividing comprises creating a plurality of equal-sized regions.
3. The method of claim 1, wherein said step of dividing comprises creating a plurality of low color-variation regions.
4. The method of claim 1 wherein said step of assigning comprises, for each said plurality of regions, the steps of:

computing said at least one screen characteristic value for each pixel in said region;

finding the most frequent screen characteristic value computed for said pixels in said region; and

assigning said most frequent screen characteristic value to each one of said pixels in said region.
5. The method of claim 4, wherein said step of computing comprises computing a function of the lowest density component of said pixel value.

6. The method of claim 1, wherein said at least one screen characteristic is chosen from the group consisting of a screen angle and a screen dot shape.
7. A method of creating a halftone image of a color image, comprising the steps of:

  - forming a digital representation of said color image, said digital representation comprising a plurality of separations;
  - dividing at least one said plurality of separations into a plurality of regions;
  - assigning at least one screen characteristic value to each said plurality of regions;
  - providing a screen generator;
  - providing image data streams to said screen generator, each said image data stream spanning at least one of said plurality of regions, said image data streams additionally comprising said at least one screen characteristic value assigned to each of said plurality of regions spanned by said data stream and a pixel count for each of said regions within said data stream; and
  - using said provided data streams to create a halftone image of said color image.
8. The method of claim 7, additionally comprising the steps of:

  - providing an imaging device, wherein each said data streams represents an imaging line of said imaging device; and
  - imaging said halftone image on said imaging device.

9. The method of claim 8, wherein said imaging device is a film imagesetter.
10. The method of claim 8, wherein said imaging device is a platesetter.
11. The method of claim 8, wherein said imaging device is a proofing device.